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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: RASMUSSEN § GROUP ART UNIT: SERIAL NO: 10/538,224 - PCT/EP03/15001 § EXAMINER:

FILED: 06/09/2005 § DOCKET: 50000/OR03

FOR: LAMINATES OF FILMS HAVING §
IMPROVED RESISTANCE TO BENDING IN §
ALL DIRECTIONS AND METHODS AND §
APPARATUS FOR THEIR MANUFACTURE §

(571) 273-0459
CERTIFICATE OF MAIL BY FACSIMILE TRANSMISSION
I hereby certain that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office that the space service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to the:

MS PCT
LEGAL DEPARTMENT
(571) 273-0459
Date of Signature

PETITION TO ACCEPT LOST DOCUMENTATION

On November 7, 2005, Applicant's attorney filed a Petition to Revive, A Statement of Unintentional Abandonment, Second Preliminary Amendment, a check for fees and a post card. Applicant's attorney received the post card in due course, which did not indicate that any of the documentation identified on the post card had not been received. Applicant's attorney also received the canceled check in due course.

Applicant's attorney attaches a copy of all of the documentation submitted to the PCT on November 7, 2005 along with a copy of the return receipt postcard attached to the Express mail label and a copy of the canceled check.

Based on this information, Applicant's attorney respectfully requests reinstatement of this application from its current abandoned status to a pending status and that the application be processed out of the PCT into the Examination queue as a fully nationalized PCT application.

Thank you very much for your cooperation in this matter.

Date: 30 April 2007

Robert W. Strozier, Reg. No. 34,024

Attorney for Applicants

Respectfully submitted



Approved for use through 10/31/2002. OMB 0651-0031 U.S. Palent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it displays a valid OMB control number.

PETITION FOR REVIVAL OF AN APPLICATION FOR PATE UNINTENTIONALLY UNDER 37 CFR 1.137(b)	Docket Number (Optional 50000-OR03			
First named inventor: Ole-Bendt Rasmussen				
Internation (PCT) Application No.: PCT/EP03/15001	U.S. Applic (if known)	cation No.: 10/538,224		

Filed: 12 September 2003

LAMINATES OF FILMS HAVING IMPROVED RESISTANCE TO BENDING IN ALL DIRECTIONS Title:

AND METHODS AND APPARATUS FOR THEIR MANUFACTURE

Attention: PCT Legal Staff Mail Stop PCT Commissioner for Patent P.O. Box 1450 Alexandria, VA 22313-1450

SNT2227996EhA3

The above-identified application became abandoned as to the United States because the fees and documents required by 35 U.S.C. 371(c) were not filed prior to the expiration of the time set in 37 CFR 1.494(b) or (c) or 1.495(b) or (c) as applicable. The date of abandonment is the day after the date on which the 35 U.S.C. 371(c) requirements were due. See 37 CFR 1.494(g) to 1.495(h).

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

NOTE:	A grantable	petition requires the following items:
MOTE:	A grantable	petition requires the following items

- (1) Petition fee
- (2) Proper reply
- (3) Terminal disclaimer with disclaimer fee which is required for all international applications having an international filing date before June 8, 1995; and
- (4) Statement that the entire delay was unintentional.

1. Petition fee

- Small entity-fee \$750 (37 CFR 1.17(m)). Applicant claims small entity status. See 37 CFR 1.27.
- Other than small entity fee \$ _____(37 CFR 1.17(m))

2. Proper reply

- The proper reply (the missing 35 U.S.C. 371(c) requirement(s)) in the form of LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371 (identify type of reply):
- has been filed previously on_
- × is enclosed herewith.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.137(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office. U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTC/SB/64 (10-01)
Approved for use through 10/31/2002. OMB 0651-0331
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3.	Terminal disclaimer with disclaimer fee
⊠	Since this international application has an international filing date on or after June 8, 1995, no terminal disclaimer is required
	A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ for a small entity or \$ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).
4. filing	STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the of a grantable petition under 37 CFR 1.137(b) was unintentional.
	Applicants were unaware that this application was not nationalized in the United States and once Applicants were made aware of the problem, present counsel was engaged to revive the application and complete the national phase filing under 35 U.S.C. 371.
WAR on th	NING: Information on this form may become public. Credit card joformation should not be included is form. Provide credit card information and authorization on Provide credit card information and authorization on Provide
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Page 1 of 1









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U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO. 10/538,224 Ole-Bendt Rasmussen 50000-OR03 INTERNATIONAL APPLICATION NO.

PCT/EP03/15001 LA. FILING DATE PRIORITY DATE 09/12/2003 12/13/2002

23873 ROBERT W STROZIER, P.L.L.C PO BOX 429 BELLAIRE, TX 77402-0429

CONFIRMATION NO. 9368

371 ABANDONMENT/TERMINATION LETTER *OC000000017286647*

Date Mailed: 10/20/2005

NOTIFICATION OF ABANDONMENT

The United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495) has made the following determination:

Applicant has failed to provide the full U.S. Basic National Fee by 30 months (37 CFR 1.495(b)(2)).

Therefore, the above identified application failed to meet the requirements of 35 U.S.C. 371 and 37 CFR 1.495, and is ABANDONED AS TO THE UNITED STATES OF AMERICA.

WINSTON M ALVARADO

Telephone: (703) 308-9140 EXT 206

PART 1 - ATTORNEY/APPLICANT COPY

FORM PCT/DO/EO/909 (371 Abandonment Notice)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: RASMUSSEN

§ GROUP ART UNIT:

SERIAL NO:

10/538,224 - PCT/EP03/15001

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FOR: LAMINATES OF FILMS HAVING IMPROVED RESISTANCE TO BENDING IN ALL DIRECTIONS AND METHODS AND

§ s

APPARATUS FOR THEIR MANUFACTURE

CERTIFICATE OF MAIL BY EXPRESS MAIL

November 7, 200

Date of Depos

Office to Addressor service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to the:

Commissioner of Patent

MS PCT

November 7, 200

P.O. Box 1450, Alexandria, VA 22313-1450

November 7, 2005 Date of Signature

STATEMENT ON UNINTENTIONAL ABANDONMENT

Applicant's attorney was using the old nationalization forms and failed to enclose the basic filing fee or authorize the Commissioner to charge his deposit account. This failure was wholly unintentional as Applicant's attorney rarely pays fees to the Patent Office until he has proof of receipt of the application. Applicant's attorney has had many problems with lost checks, lost documents and miss application of funds. Therefore, Applicant's attorney generally does not file with fees until he has some proof that the patent office has received the application. Applicant's attorney was not aware that the nationalization rules required payment of at least the basic fees as no other type of application requires the same.

Date: November 7, 2005

Respectfully submitted,

Robert W. Strozier, Reg. No. 34,024

Attorney for Applicants



PTC-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PTC-1390 (Rev. 07-2005)

Approved for use through 3/31/2007, OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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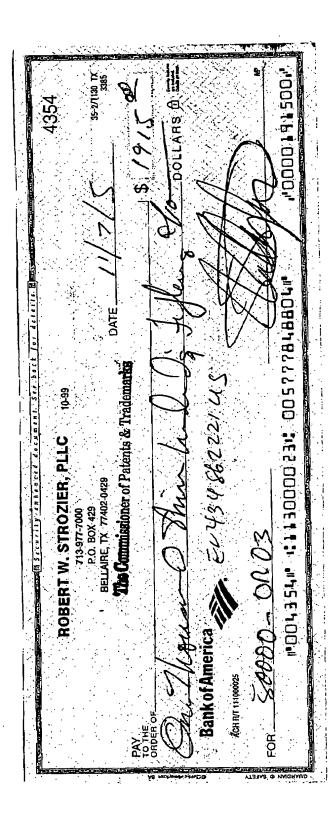
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NOTE and g	: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed ranted to restore the international Application to pending status.
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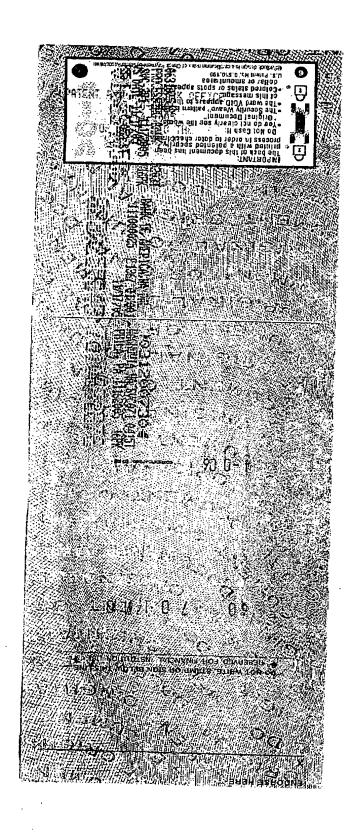


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ROBERT W STROZIER, PLLC

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: RASMUSSEN GROUP ART UNIT: SERIAL NO: 10/538,224 - PCT/EP03/15001 **EXAMINER:** FILED: DOCKET: FOR: LAMINATES OF FILMS HAVING Ş IMPROVED RESISTANCE TO BENDING IN § ALL DIRECTIONS AND METHODS AND § APPARATUS FOR THEIR MANUFACTURE §

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SECOND PRELIMINARY AMENDMENT

Dear Sir/Madam:

Please amend the claims as follow.

AMENDMENTS

In the Claims

Canceled Claims

Please cancel claims 1-99, without prejudice.

Amended Claims

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- 1 100.(previously presented)
- A laminate comprising a monofilm-formed or

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2	multifilm-formed ply	' A,	and	another	monofilm-formed	or	multifilm-formed	ply	/ B,	both
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- 3 mainly comprising orientable thermoplastic polymer material, in which A has a fluted
- 4 configuration and B on a first side is adhesive bonded in bonding zones to the crests on a first
- 5 side of A,
- 6 where:
- 7 (a) B also has a fluted configuration, the flute direction of B forming an angle from
- 8 generally about 30 up to and including 90 to the flute direction of A and the said bonding
- 9 zones being on the crests of the first side of B to produce spot bonding with the crests on the
- 10 first side of A,
- (b) the adhesive bonding is
- 12 (i) directly A to B and established through a lamination layer on A and/or B;
- (ii) established through a separate thin bonding film; or
- (iii) through a fibrous web adapted for bonding, and
- (c) the wavelengths of the flutes in A and/or B are no longer than 5 mm, and the
- wavelengths of the flutes in both A and B are less than 10 mm.
- 1 101.(previously presented) The laminate according to claim 100, wherein either the
- 2 thickness of each of the said plies is generally the same in bonded and unbonded zones, or
- 3 at least one of the plies exhibits first solid-state- attenuated zones extending parallel to the
- 4 flute direction, each bonding zone mainly being located within such a first attenuated zone
- 5 whereby each first attenuated zone is understood as delimited by the positions where the
- 6 thickness is an average between the minimum thickness of this ply within the first attenuated
- 7 zone and theply's maximum thickness within the adjacent non-bonded zone.
- 1 102.(previously presented) The laminate according to claim 100, wherein the flute
- 2 wavelength in each of the two plies is no more than 4 mm, preferably no more than 3 mm and
- 3 still more preferably no more than 2 mm.

- 1 103.(previously presented) The laminate according to claim 100, wherein each of the
- 2 two plies the curved length of a flute is on average at least 5% and preferably at least 10%
- 3 longer than the linear wavelength, the curved length being understood as the length of a
- 4 curve through the cross section of a full flute wave including the bonding zone which curve
- 5 lies in the middle between the two surfaces of the ply.
- 1 104.(previously presented) The laminate according to claim 103, wherein at least one
- 2 of said plies the said average is at least 15%.
- 1 105.(previously presented) The laminate according to claim 103, wherein the width
- 2 of each bonding zone in at least one of the two plies is no less than 15%, preferably no less
- 3 than 20%, and still more preferably no less than 30% of the flute wavelength.
- 1 106.(previously presented) The laminate according to claim 100, wherein the flutes
- 2 in at least one of the two plies are evenly formed and extend in a generally rectilinear shape.
- 1 107.(previously presented) The laminate according to claim 100, wherein the flutes
- 2 in at least one of the two plies while extending mainly along one direction, are curved or
- 3 zig-zagging and/or branched.
- 1 108.(previously presented) The laminate according to claim 100, wherein the flutes
- 2 in at least one of the two plies while extending mainly along one direction are differently
- 3 shaped in a pattern which gives a visual effect showing a name, text, logo or similar.
- 1 109.(previously presented) The laminate according to claim 100, wherein at least one
- 2 of the two plies has a metallic or iridescent gloss, or the two plies have different colours.
- 1 110.(previously presented) The laminate according to claim 100, wherein the main

- 2 direction in which the flutes of A extend is generally substantially perpendicular to the main
- 3 direction in which the flutes of B extend.
- 1 111.(previously presented) The laminate according to claim 110, wherein one of the
- 2 said two directions essentially coincide with the machine direction of the lamination.
- 1 112.(previously presented) The laminate according to claim 100, wherein A, outside
- 2 its first attenuated zones if such zones are present, is molecularly oriented mainly in a
- 3 direction parallel to the direction of its flutes or in a direction close to the latter as determined
- 4 by shrinkage tests.
- 1 113.(previously presented) The laminate according to claim 112, wherein B also is
- 2 molecularly oriented and B's orientation outside its first attenuated zones if such zones are
- 3 present is higher than A's average orientation in the same direction outside its first attenuated
- 4 zones if such zones are present, the said two orientations being observable by shrinkage tests.
- 1 114.(previously presented) The laminate according to claim 112, wherein the yield
- 2 tension in A in a direction parallel with its flutes and/or the yield tension in B in a direction
- 3 parallel with its flutes, both referring to the cross- section of the respective ply and
- 4 determined in non-bonded narrow strips at an extension velocity of 500%min-1, is no less
- 5 than 30 MPa, preferably no less than 50 MPa and still more preferably no less than 75 MPa.
- 1 115.(previously presented) The laminate according to claim 100, wherein B has a
- 2 lower coefficient of elasticity than A, both as measured in the direction perpendicular to the
- 3 flute direction of A.
- 1 116.(previously presented) The laminate according to claim 112, wherein the choice
- 2 of material for B and of depth of A's fluting is such that by stretching of the laminate

- 3 perpendicular to the direction of A's fluting up to the point where A's waving has
- 4 disappeared, B still has not undergone any significant plastic deformation, preferably B
- 5 comprises a thermoplastic elastomer.
- 1 117.(previously presented) The laminate according to claim 112, wherein B, outside
- 2 its first attenuated zones if such zones are present, has a main direction of molecular
- 3 orientation parallel to the direction of the flutes or in a direction close to the latter as provable
- 4 by shrinkage tests.
- 1 118.(previously presented) The laminate according to claim 112, wherein A is
- 2 composed of several films, and the said main direction of molecular orientation, is the
- 3 resultant of different monoaxial or biaxial orientations in the said films optionally mutually
- 4 differently directed.
- 1 119.(previously presented) The laminate according to claim 117, wherein B is
- 2 composed of several films, and the said main direction of orientation is the resultant of
- 3 differentmonoaxial or biaxial orientations in the said films optionally mutually differently
- 4 directed.
- 1 120.(previously presented) The laminate according to claim 100, wherein the first
- 2 attenuated zones are present in at least one of the two plies wherein if such zones of
- 3 attenuated ply extend in their transverse direction beyond the corresponding zones of bonding
- 4 into non-bonded zones of the ply, the extensions within each non-bonded zone are limited
- 5 to a total width which leaves more than half of and preferably no less than 70% of the width
- 6 of the non-bonded zone as not belonging to any first attenuated zone, these widths being the
- 7 distances measured along the curved surfaces.
- 1 121.(previously presented) The laminate according to claim 100, wherein the first

- attenuated zones are present in at least one of the plies and in which the bonding zones are 2
- generally coincident with the first attenuated zones. 3
- 1 122.(previously presented) The laminate according to claim 100, wherein the first
- 2 attenuated zones are present at least in one of the two plies. characterised by a second
- solid-state-attenuated zone between each pair of adjacent first attenuated zones, said second 3
- attenuated zones being narrower than said first attenuated zones and located on the 4
- 5 non-bonded crests of the respectively ply.
- 1 123.(previously presented) The laminate according to claim 100, wherein at least one
- of the two plies exhibits solid-state-attenuated zones wherein the first attenuated zones of the 2
- ply are attenuated so that the minimum thickness in such zone is less than 75% of the 3
- maximum thickness of the ply in the non-bonded zone, preferably less than 50% and more 4
- preferably less than 30% of that maximum thickness. 5
- 124.(previously presented) 1 The laminate according to claim 100, wherein A and B
- consist of material which is orientable at room temperature, preferably they mainly consist 2
- 3 of polyolefin.
- 1 125.(previously presented) The laminate according to claim 100, wherein the
- spot-bonding between plies A and B is effected through a lower melting surface layer on at 2
- least one of the plies, formed in a coextrusion process. 3
- 126.(previously presented) 1 The laminate according to claim 100, wherein at least one
- of the plies comprises a barrier film designed for protection against oxygen or other gaseous 2
- 3 materials.
- 127.(previously presented) 1 The laminate according to claim 100, wherein at least

- 2 some of the flutes in one or both plies are flattened at intervals and preferably bonded across
- 3 each ones entire width at the flattened locations to make the two arrays of flutes form closed
- 4 pockets.
- 1 128.(previously presented) The laminate according to claim 127, wherein the flattened
- 2 portions of a number of mutually adjacent flutes or of all flutes are in array.
- 1 129.(previously presented). The laminate according to any of claim 100, wherein by
- 2 the choice of polymer material or by an incorporated filler or by orientation, the coefficient
- 3 of elasticity E in at least one of the plies, measured in the unbonded zone of the ply in the
- 4 direction parallel to the flute, as an average over the unbonded zone is no less than 700 MPa,
- 5 and preferably no less than 1000 MPa.
- 1 130.(previously presented) The laminate according to claim 100, wherein at least
- 2 some of the channels formed by the flutes in A and B, which channels may be closed to
- 3 pockets, contain a filling material in particulate, fibrous, filament or liquid form.
- 1 131.(previously presented) The laminate according to claim 130, wherein said
- 2 material is a preservative for goods intended to become packed in or protected by the
- 3 laminate, preferably an oxygen scavenger or ethylene scavenger, a biocide, such as a
- 4 fungicide or bactericide, a corrosion inhibitor or a fire extinguishing agent, optionally with
- 5 micro-perforations established in the flutes to enhance the effect of said preservative.
- 1 132.(previously presented) The laminate according to claim 100, wherein both A and
- 2 B are supplied with a multitude of perforations, whereby the perforations do not reach into
- 3 the bonded spots, and the perforations in A are displaced from the perforations in B so as to
- 4 cause gas or liquid when passing through the laminate, to run a distance through the flutes
- 5 generally parallel to the main surfaces of the laminate; the channels formed by the flutes may

- 6 be closed to form pockets.
- 1 133.(previously presented) The laminate according to claim 132, wherein the channels
- 2 or pockets contain filling material adapted to act as a filter material by holding back
- 3 suspended particles from a fluid passing through the channels or pockets or is an absorbent
- 4 or ion-exchanger capable of absorbing or ion-exchanging matter dissolved in such fluid, said
- 5 filler optionally being fibre-formed or yarn-formed.
- 1 134.(previously presented) The laminate according to claim 133, wherein by choice
- 2 of hydrophobic properties of at least the inner surfaces of the channels or pockets formed by
- 3 the flutes and by selected small spacing of said channels or pockets, and choice of the
- 4 distances between the mutually displaced perforations in A and B, there is achieved a
- 5 desirable balance between the pressure needed to allow water through the laminate and the
- 6 laminate's capability to allow air and vapour to pass therethrough.
- I 135.(previously presented) The laminate according to claim 132, wherein by a nap
- 2 of fibre-like film portions protruding from the borders of the perforations of at least on one
- 3 surface of the laminate.
- 1 136.(previously presented) The laminate according to claim 134, used as a sanitary
- 2 backsheet, preferably on a diaper or as a sheet for covering a patient during surgery.
- 1 137.(previously presented) The laminate according to claim 134, used for insulation
- 2 of buildings.
- 1 138.(previously presented) The laminate according to claim 132, used as a geotextile
- 2 which allows water to pass but holds fine particles back.



- 1 139.(previously presented) A bag made from the laminate according to any of the
- 2 claims 100 to 139, wherein the flutes on one of the two major surfaces of the bag are
- 3 generally perpendicular to the flutes on the other major surface of the bag.
- 1 140 (previously presented) A method of manufacturing a laminate of a first monofilm-formed or multifilm-formed ply with a second monofilm-formed or 2 multifilm-formed ply both mainly consisting of orientable thermoplastic polymer material, 3 in which the first ply hasa waved flute configuration, and the second ply on a first side is 4 adhesive bonded in bonding zones to the crests on a first side of A, in which further the 5 waved flute structure of the first ply is formed by the use of a grooved roller, and the said 6 bonding with the second ply is carried out under heat and pressure and also under use of a 7 grooved roller, wherein a) the second ply also is given a waved configuration, whereby under 8 9 use of at least one grooved roller the flute direction of the second ply is made at an angle to the flute direction of the first ply and the said bonding zones are established on the crests of 10 the first side of the second ply to introduce spot bonding with the crests on the first side of 11 the first ply, b) the adhesive bonding i) is directly first to second ply and established through 12 a lamination layer on at least one of these plies; ii) established through a separate thin 13 bonding film; or iii) established through a fibrous web adapted to the bonding; and c) the 14 wavelengths of the flutes in both plies are no longer than 10 mm, and the wavelengths of the 15 16 flutes in at least one of the plies are no longer than 5 mm.
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- 1 173.(previously presented) A laminating apparatus comprising a grooved roller for
- 2 fluting a first ply of thermoplastic polymer material, a grooved roller for fluting a second ply

- of thermoplastic polymer material, means for directing the first and second plies from their 3 respective grooved rollers to a laminating station with the plies arranged in face to face 4 contact with one another and with the flutes of the first ply generally directed at an angle to 5 the flutes of the second ply, the laminating station comprising grooved laminating rollers 6 which apply heat and pressure between the plies to bond the plies together at the crests of the 7 flutes of the second ply to form a laminate, the grooved fluting rollers and the grooved 8 laminating rollers having groove pitches such that in the laminate the plies each have flutes 9 10 of wavelength less than 10 mm and the flutes of at least one of the plies have a wavelength 11 no longer than 5 mm.
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Respectfully submitted,

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